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After an incredible summer as a research assistant in the 2002 NASA Astrobiology Academy (NAABA2K2), I am looking forward to returning for a second round as staff for the 2003 Academy! I graduated in May 2002 from Tufts University in Boston, Massachusetts, with my BS in Civil and Environmental Engineering. Not convinced that I wanted to invest my future in the design of static structures, I began to venture into the world of biological sciences and, more specifically, the use of engineering principles to solve biological problems. I spent the summer of 2002 working with Dr. David Des Marais and Dr. Leslie Prufert-Bebout on a project entitled “Charting the History of Earth’s Earliest Microbial Ecosystems”. Fellow research assistant, Bekah Shepard, and I designed and built simulated natural environments in which to measure the growth patterns and biological processes of cyanobacteria from marine environments.

Unfortunately, the ten weeks spent in NAABA2K2 were not enough for me, and in September of 2002 I packed up the car and moved from my home in Boston back to sunny California. Since October I have had the privilege of working with Dr. Ruth Globus, Dr. Nancy Searby, and Dr. Eduardo Almeida in the NASA Ames Bone and Signaling Laboratory. We work to understand the cell signaling pathways that are associated with bone mass loss resulting from reduced mechanical loading. I have spent the majority of my time lately designing our protocol to quantify the curvature of mouse tibiae and analyzing differences in bone curvature due to age, gender, and genotype. My experience at Ames has been nothing but superb and has strengthened my decision to go into the field of biomechanical engineering.

It is difficult to put into words how the Academy influenced my life path and my ultimate career decisions. Since NAABA2K2 I have had the privilege of conducting research in an outstanding NASA laboratory with top researchers in my field. I have found a passion in biomechanical engineering, and in the fall of 2003, I will begin my graduate studies at Stanford University. It is my hope to collaborate with both NASA Ames and Stanford

through my Ph.D. program, studying biomechanics and its applications to extended space exploration.

Outside of NASA and academics, I entertain myself with a variety of activities. I was on the board of directors for the Society of Women Engineers at Tufts and was active in engineering outreach efforts to elementary and middle school kids. I co-captained my high school volleyball and softball teams, as well as my college rugby team, and I think I've played basketball and soccer since I started walking. I had my first run-in with the ski slopes this past January in a NAABA2K2 reunion at Lake Tahoe (you can all ask Mike how we ended up on a black diamond course...). Although unsuccessful at water skiing during last summer's Tahoe trips, I refuse to leave this summer without getting up on the skis! I'll take any chance that I get to travel, especially if it's going home to Boston! I am looking forward to traveling to Banff, Canada, this May to join the rest of NAABA2K2 in presenting our group project at the International Academy of Astronautics (IAA) Humans in Space Symposium. Academically, I am a member of Tau Beta Pi, Golden Key, and ASCE. I have vowed to in the future be able to add SCUBA diving to my extra-curricular activities, and to someday begin working towards a pilot's license.

I am very much looking forward to meeting and getting to know all of you in the 2003 crew and am so happy to have the opportunity to experience the NASA Academy for a second time! It's going to be a great summer!